

## HOLLOW SHAFT ENCODER FOR SERVO/STEP MOTOR APPLICATION

Type	HTR - H - $\Lambda$ - $\Lambda$		
Power Supply	DC5V (fixed) or DC8~26V		
Current Consumption	< 60 Ma		
Detection System	Incremental		
Pulse/Rev.	10	100	200
	20	120	250
	40	125	300
	50	150	360
	60	180	400
	500	800	1800
	512	1000	2000
	600	1024	2048
	720	1500	
Output Phase	A / A,B / A,B,Z Phase		
Output Wave	Square Wave		
Output Capacity	Sync. Current: 20mA Residual Voltage: 0,5V or Less		
Max. Response	50 kHz ~ 100 kHz		
Phase Different	A,B Phase diff. $90^{\circ} \pm 45^{\circ}$ T/4 $\pm$ T/8 Z Phase T $\pm$ T/2		
Wave form Rise/Fall	2 s or Less		
Starting Torque	< 30 gf-cm		
Shaft Loading	Axial	2 kg	1 kg
	Radial	1 kg	0,5 kg
Max. Speed	6.000 rpm		
Operating Temp./Humidity	0° C ~ 60° C RH 35% ~ 90% (No Condensation)		
Storage Temp.	-20° C ~ 80° C		
Vibration	10 G (10 $\pm$ 1500 Hz)		
Protection	Dust Proof		
Polarity	Against Reverse Protection		
Shock	20G per 11ms		
Cable	$\varnothing$ 4,5 vinyl and 500 mm long		
Weight	< 200 g.		
Hole size	6 / 6,35 / 8 / 10 mm		

